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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/609,126

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Uwe Krueger

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64280

7590

09/15/2009

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BOSTON, MA 02111

EXAMINER

KANG, INSUN

ART UNIT

PAPER NUMBER

2193

MAIL DATE

DELIVERY MODE

09/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/609,126	Applicant(s) KRUEGER, UWE	
	Examiner INSUN KANG	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,12-14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9,12-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responding to the RCE amendment filed on 7/1/2009.
2. Claims 1, 4-9, 12-14, and 16 are pending in the application.

Specification

3. The computer program listings in the specification exceed 300 lines (up to 72 characters per line) and therefore, must be submitted on a compact disc in compliance with § 1.52(e). A compact disc containing such a computer program listing is to be referred to as a "computer program listing appendix." The specification must include a reference to the "computer program listing appendix" at the location indicated in § 1.77(b)(5).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-9, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al. ("A General Purpose Virtual Collaboration Room," IEEE, pages 1-10, 10/1999) hereafter "Huang" in view of Yang et al. ("Transaction Management in Collaborative Virtual Environment," 7/26/1999), hereafter Yang, Pirri et al. ("A Java applet-based virtual environment as a usable interface to distributed services and collaborative applications on the Internet," IEEE, 6/1999) hereafter Pirri.

Art Unit: 2193

Per claim 1:

Huang discloses:

-a virtual object space providing access to a plurality of objects, each object having a set of functionality and being identifiable by a unique identifier provided by the virtual object space (i.e. page 2, right col., paragraph 2) and providing generic object functionality for the plurality of objects (i.e. page 2, right col., paragraph 1) including an associations and transactions functionality for relating objects and interaction between objects (i.e. page 3, section 2. An overview of the VCR, first paragraph, lines 1-7; page 2, right col., paragraph 2); a distribution functionality for locking, flushing, and copying of the virtual object space (i.e. page 9, left col., lines 1-20) ; and persistency functionality for maintaining persistency of the objects (i.e. page 5, right col., section 3.2 Object manipulation, paragraph 4).

Huang does not explicitly teach the associations and transactions functionality configured to provide transactions using a two-phase commit to handle different memory copies of object states of the plurality of objects. However, Yang teaches such transactions using a two-phase commit in a virtual collaboration environment was known in the pertinent art, at the time applicant's invention was made, to ensure information integrity across distributed data sources(i.e. section 3.1 Data Management, fifth paragraph). It would have been obvious for one having ordinary skill in the art to modify Huang's disclosed system to incorporate the teachings of Yang. The modification would be obvious because one having ordinary skill in the art would be motivated to ensure successful transaction updates in a distributed database environment.

Art Unit: 2193

Huang and Yang do not explicitly teach a first interface for applications using the plurality of objects and a second interface for service deploying the plurality of objects. However, Pirri teaches providing an interface to distributed internet applications and services in a virtual collaboration environment was known in the pertinent art, at the time applicant's invention was made, to enable applications to use objects in the virtual space and distribute the objects (i.e. page 859, left col., second paragraph). It would have been obvious for one having ordinary skill in the art to modify Huang and Yang's disclosed system to incorporate the teachings of Pirri. The modification would be obvious because one having ordinary skill in the art would be motivated to allow distributed applications to access the virtual room in Huang and enable services to deploy the virtual objects.

Pirri further discloses the service providing an adapter to map the unique identifier to the plurality of objects and to objects internal to the service (i.e. page 859, left col., second paragraph; 860, right col., fourth par.).

Huang further discloses: the access being a virtual access provided using the unique identifier without physically storing the plurality of objects at the virtual object space (i.e. page 2, right col., paragraph 2); and a visualization framework for visualizing the plurality of objects independently of an application implementing the object, each object being visualized using the object's unique identifier and according to the object's corresponding set of functionality (i.e. Fig. 1; page 6, right col., second paragraph).

Per claim 4:

The rejection of claim 1 is incorporated, and further, Huang teaches:

Art Unit: 2193

-framework services providing common event handling of the plurality of objects(i.e. page 5, left col., lines 19-22).

Per claim 5:

This is another framework version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1.

Huang further discloses a user interface for receiving input from a user relating to a desired arrangement of one or more of the plurality of objects (i.e. Fig. 1; page 3, left col., section 2. An Overview of the VCR, first paragraph; lines 11-13) and a visualization framework for visualizing objects according to the desired arrangement, each object being visualized using the object's unique identifier independently of an application implementing the object (i.e. Fig. 1; page 6, right col., second paragraph).

Per claim 6:

Huang further teaches:

- wherein the user interface further includes allowing a user to browse the plurality of objects independent of one or more applications implementing the objects (i.e. Fig. 1; page 3, left col., second paragraph, lines 1-6).

Per claim 7:

The rejection of claim 5 is incorporated, and further, Huang teaches:

Art Unit: 2193

- the desired arrangement is hierarchical(i.e. page 3, section 2. An overview of the VCR, first paragraph, lines 9-11).

Per claim 8:

The rejection of claim 5 is incorporated, and further, Huang teaches:

- the visualization framework includes an object viewer(i.e. page 4, paragraph 2, lines 1-5, 13-19);

Per claim 13:

The rejection of claim 1 is incorporated, and further, Huang teaches:

- providing a portlet to access the generic object functionality to visualize the structure of the plurality of objects(i.e. Fig 1 in page 4).

Per claims 9, 12, and 14, they are the method versions of claims 1, 4, 13 respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 4, and 13 above.

Per claim 16:

Pirri further discloses:

-implementing the plurality of objects to include the first interface accessible by the framework and the second interface accessible by a service acting as an adapter between the framework and an application separate from the framework (i.e. page 859, left col., second paragraph).

Response to Arguments

Art Unit: 2193

6. Applicant's arguments with respect to claims 1, 4-9, 12-14, and 16 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

7. Per claim 1, in line 13, "a_service" needs to be corrected to "a service."

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-F 8:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Examiner, Art Unit 2193

Application/Control Number: 10/609,126

Page 8

Art Unit: 2193